



# UNITED STATES PATENT AND TRADEMARK OFFICE

*Elh*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,116	06/26/2003	Brent A Anderson	BUR920030031US1	1115
23550	7590	02/16/2006	EXAMINER	
HOFFMAN WARNICK & D'ALESSANDRO, LLC			GARCIA, JOANNIE A	
75 STATE STREET			ART UNIT	
14TH FL			PAPER NUMBER	
ALBANY, NY 12207			2823	

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/604,116	<b>Applicant(s)</b> ANDERSON ET AL.	
	<b>Examiner</b> Joannie A. García	<b>Art Unit</b> 2823	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 16-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-25 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,16 and 17 is/are rejected.
- 7) ☒ Claim(s) 3,5,7-10 and 18-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, 4, 6, 16, and 17, are rejected under 35 U.S.C. 102(e) as being anticipated by Lowrey et al (U.S. Patent 5,328,810).

The rejection is maintained as stated in the Office Action mailed 05-27-05, and as stated below.

Applicant argues that Lowrey et al does not teach or suggest recrystallizing the polycrystalline semiconductor layer. However, Lowrey et al discloses recrystallizing the polycrystalline semiconductor layer, as disclosed in Column 7, lines 7-14.

Lowrey et al discloses forming a non-monocrystalline mandrel 21 on a monocrystalline base structure 12 (Figure 7, Column 5, lines 62-65, and Column 6, lines 49-51), forming a conformal polycrystalline semiconductor layer 72 on at least one sidewall of the mandrel, the polycrystalline layer contacting the monocrystalline base structure temperature deposited comprising depositing a polycrystalline semiconductor layer 72 on the base structure and the mandrel (Figure 7, Column 6, lines 49-60, and Column 7, lines 35-47), selectively removing a portion of the polycrystalline semiconductor layer, wherein a remaining portion of the polycrystalline layer contacts at least one sidewall of the mandrel and the base structure (Figure 7, Column 6, lines 49-60, and Column 7, lines 35-47), removing the mandrel (Figure 11), recrystallizing the polycrystalline semiconductor layer to have a crystallinity substantially similar to that of the base structure (Column 7, lines 29-47), forming a gate structure on the semiconductor layer (Column 7, lines 64-68), forming an insulating layer 91 (Figure 9, Column

6, lines 67-68, and Column 7, lines 1-2), and further comprising removing the mandrel 21 (Figure 11, Column 7, lines 14-20), and recrystallizing the polycrystalline semiconductor layer through heating (Column 7, lines 29-47).

Claims 3, 5, 7-10, and 18-20, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 21-25 are allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joannie García whose telephone number is (571) 272-1861. The examiner can normally be reached on Monday through Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith, can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JAG  
February 06, 2006

GFourson  
Primary Examiner



George Fourson  
Primary Examiner  
Art Unit 2823